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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO 09/676,391 09/29/2000 1818 Marcia Rojewski Hartford-3 **EXAMINER** 7590 12/02/2004 ARTHUR L. PLEVY, ESQ. FRENEL, VANEL Duane, Morris & Heckscher LLP ART UNIT PAPER NUMBER Suite 100 100 College Road West 3626 Princeton, NJ 08540

DÁTE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/676,391	ROJEWSKI ET AL.
	Examiner	Art Unit
	Vanel Frenel	3626
The MAILING DATE of this communic Period for Reply	eation appears on the cover sheet w	ith the correspondence address
A SHORTENED STATUTORY PERIOD FO THE MAILING DATE OF THIS COMMUNIC - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this commu - If the period for reply specified above is less than thirty (30) - If NO period for reply is specified above, the maximum state - Failure to reply within the set or extended period for reply w Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b).	CATION. f 37 CFR 1.136(a). In no event, however, may a nication. days, a reply within the statutory minimum of thiutory period will apply and will expire SIX (6) MOI ill, by statute, cause the application to become A	reply be timely filed rty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed	l on <u>05 A<i>pril 2004</i></u> .	
2a)⊠ This action is FINAL . 2l	b)☐ This action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) Claim(s) 1-21 is/are pending in the ap 4a) Of the above claim(s) is/are 5) Claim(s) is/are allowed. 6) Claim(s) 1-21 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction	e withdrawn from consideration.	
Application Papers		·
9) The specification is objected to by the Examiner.		
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
	ocuments have been received. ocuments have been received in A f the priority documents have beer al Bureau (PCT Rule 17.2(a)).	Application No n received in this National Stage
Attachment(s)		
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)		
Notice of Draftsperson's Patent Drawing Review (PT Information Disclosure Statement(s) (PTO-1449 or Paper No(s)/Mail Date	O-948) Paper No(s)/Mail Date Informal Patent Application (PTO-152)

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DETAILED ACTION

Notice to Applicant

This communication is in response to the Amendment filed on 04/05/04. Claims
 1-9, 16, 18-21 have been amended. Claims 10-15 and 17 have not been amended.
 Claims 1-21 are pending.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Risk & Insurance; Technology: "Unlocking the Neural Network" by John Mutch; Jan 1999) in view of High –tech sleuths by Leslie Werstein Hann. Best Review.

 Property/Casualty insurance edition; Nov.1998; Vol.99, Iss.7; pg 83; 3 pgs).
- (A) As per claim 1, John discloses "computerized" (See John, Page 1, Paragraphs 1-
- 3). John does not explicitly disclose "the steps of" and "outputting the resulting value".

However, this feature is known in the art, as evidenced by Leslie. In particular, as suggested by (The Examiner "easily outstrip those in the other lines of business" to be a form of "outputting the resulting value" See Leslie, Page 3; Paragraphs 2-9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Leslie with in the system of John with the

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motivation of helping insurance investigators uncover fraud more effectively (See Leslie, Page 1, Paragraph 4).

- (B) As per claim 2, Leslie disclose "the steps of" and "recover" (See Leslie, Page 4, Paragraph 1).
- (C) Claims 3-9 and 16, 18-20 were apparently amended to include the words "the steps of". However, these changes do not affect the scope and the breadth as originally presented /or in the manner in which the claim was interpreted by the Examiner. As such, this claim is rejected under the same reason given in the claims 1-2, and incorporated herein.
- (D) Amended claim 21 is recited "and a means for outputting the value" is rejected under the same rationale as claim 1 above, and incorporated herein.
- (E) Claims 10-15 and 17 have been not been amended and are therefore rejected for the same reasons given in the previous Office Action, and incorporated herein.

Response to Arguments

4. Applicant's arguments filed on 04/05/04 with respect to claims 1-9 and 16, 18-21 have been considered but are most in view of the new ground(s) of rejection.

Applicant's arguments will be addressed hereinbelow in the order in which they appear in the response filed 04/05/04.

- (A) At page 9 of the 04/05/04 response, Applicant argues the following:
 - (1) The 35 U.S.C. 101 rejection for claims 1-21.

The above argument is as addressed below:

(1) Regarding the requirement under 35 U.S.C. § 101 that a claimed invention be limited to the technological arts in order to be deemed statutory and in response to Applicant's arguments found on page 9, the Examiner submits that the phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts." See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts."

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature," "natural phenomena," and "abstract ideas." See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998). This addresses the second test under 35 U.S.C § 101 of whether or not an invention is

eligible for a patent. The Manual of Patent Examining Procedure reiterates this point. More specifically, MPEP § 2106(II)(A) states, "The claimed invention as a whole must accomplish a practical application. That is, it must produce a 'useful, concrete and tangible result.' *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601-02." Furthermore, "Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. 101." (MPEP § 2106(II)(A))

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts." The court developed a "technological arts" analysis: The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to bean improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the

"technological art" because the claimed invention was an operation being performed by a computer within a computer.

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The decision in State Street Bank & Trust Co. v. Signature Financial Group, Inc. never addressed this prong of the test. In State Street Bank & Trust Co., the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little. if any, application to determining the presence of statutory subject matter but rather. statutory subject matter should be based on whether the operation produces a "useful." concrete and tangible result." See State Street Bank & Trust Co. at 1374. Furthermore. the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See State Street Bank & Trust Co. at 1377. Both of these analyses go towards whether the claimed invention is non-statutory because of the presence of an abstract idea. State Street never addressed the first part of the analysis, i.e., the "technological arts" test established in Toma because the invention in State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the Toma test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences in affirming a §101 rejection finding the claimed invention to be non-statutory for failing the technological arts test. See Ex parte Bowman, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

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What is indeed important to note in the Bowman decision is that the Board acknowledged the dichotomy of the analysis of the claims under 35 U.S.C. § 101. thereby emphasizing the fact that not only must the claimed invention produce a "useful." concrete and tangible result," but that it must also be limited to the technological arts in order to be deemed statutory under the guidelines of 35 U.S.C. § 101. In this present case, claim 1 recites "a computer" in its preamble but does not recite any technological device in the body of the claim in performing the various steps of "processing" within the computer system. Therefore, Applicant's argument is not persuasive and the rejection is hereby sustained.

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5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanel Frenel whose telephone number is 703-305-4952. The examiner can normally be reached on Monday-Thursday from 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 703-305-9588. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 23, 2004